

MEMORANDUM



355540

SUBJECT: ROCK ISLAND COUNTY -John Deere Foundry
(East Moline) Compliance Evaluation Inspection

TO: DWPC/FOS and RU

FROM: James E. Kammueler DWPC-FOS, Region 3

DATE: March 12, 1981

INTERVIEWED: Mike McGuire, Senior Engineer (and by phone on March 18 & 20)
Ralph Foss, General Supervisor
John Smith, Environmental Engineer

On the above date a CEI was conducted at the subject industry. This was conducted following completion of a compliance conference we had earlier in the day with Deere representatives. Details of that compliance conference are outlined in a separate memo also dated March 12, 1981.

A copy of our previous CEI letter dated April 21, 1980 is attached with comments updating observations made during this inspection. The following is also a summary of observations made during this inspection.

FOUNDRY EXPANSION AND PERMIT SITUATION: Details of this foundry may be found in my previous inspection reports dated September 18, 1979 and March 12, 1980. Foundry expansion is underway and will be 50% completed by this summer with total completion expected by the Fall of 1982. A construction permit (1980-EN-1476) has been issued for the two new Marley cooling towers which have already been constructed. On February 10, 1981, another permit application was submitted for modifications to the existing wet scrubber clarifier system and also the addition of another cooling tower to handle air conditioner (A.C.) cooling water. The modifications to the scrubber system include cyclones and a recirculation tank to enable reduction of the amount of scrubber system water being bled off through the clarifier to be reduced to 400 gpm (10% of 5.76 MGD) which is the clarifiers design. The clarifier is presently handling higher flow volumes. This A.C. water cooling tower had not yet been installed.

The new expansion will not add any flow to the clarifier since bag-houses will be used instead of wet scrubbers. However, blowdown from the two new Marley towers will be fed to the cooling water stream tributary to 003. Reportedly only organic chemical additives will be used in these new towers.

Flow increases to 002 will be 3 gpm of blowdown from the A.C. cooling tower plus an undetermined volume of cooling water from the new ladle area once the new foundry gets in full production (not expected to happen immediately). The present ladle area is to become a part of this new ladle area. Reportedly a sump is provided in this ladle area to catch large pieces of slag which leave the ladles in the cooling water.

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NPDES PERMIT SITUATION: The company's NPDES Permit expires June 30, 1981. They have not yet submitted a renewal application but have received an extension of time to submit this. They expect to be submitting it shortly. Since their previous permits contained certain incorrect parts at this time, they should be rewritten in regard to the following items:

1. Temperature limitations need to be placed upon the two unnamed ditches to which the foundry discharges, which are eventually tributary to Sugar Creek.. The present permit contains only temperature limitations for Sugar Creek.
2. BOD limits on Outfall 002 should be 10 mg/l instead of 20 mg/l.
3. TSS limits on Outfall 002 should be 12 mg/l instead of 25 mg/l.
4. Phenol limitations should be added to Outfall 002. A June 18, 1980 sample collected by Deere showed 2.07 mg/l of phenol in this discharge.
5. Total iron limits should possibly be added to Outfall 003. A sample of this discharge collected by Deere on January 14 and 15, 1981 showed a total iron level of 2.14 mg/l.
6. Based on our experience to date with foundry operations it might be advisable to add a phenol limit to discharge 003, at least for the time being. Some sampling to date by Deere has reportedly not shown any phenol contamination in the dust collection water but more frequent sampling is probably needed to confirm this.
7. TDS limits should be added to 002 and 003 because of the cooling towers.

OUTFALL 001: There was no apparent discharge from this outfall at the time of the inspection. The air conditioner cooling water which enters this outfall, when the air conditioners operate, is to be diverted to the Marley cooling towers. There was no evidence of recent clarifier discharges from this outfall.

DISCHARGE 002: Quite a bit of dark oil was present on the surface of the cil separators, despite the fact that these are reportedly skimmed in the morning and again on second shift change. There was visible oil burping up between the baffle and the overflow weir, which was discharging out with the final effluent. The final effluent had a gray, emulsified oil color and contained visible floating oil. The discharge was turning the receiving stream gray in color in the vicinity of the outfall and visible oil was present in the stream. This discoloration and oil had fairly well dissipated within about 50' below the discharge.

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A Marsh-McBirney inductance in-line flow meter had been installed around last July to monitor 002 discharge. This meter reportedly measures wetted perimeter and velocity to obtain Q. Meter range is reportedly adjustable between 0.1 MGD and 200 MGD. Low range accuracy may be somewhat questionable. There have been some bubbler problems. Flow readings for Outfall 003 are now being calculated, based on daily water consumption minus 002 flow minus an evaporation factor. This meter and related appurtenances were not observed during this inspection. DMR's for August, 1980 thru January, 1981 show an average flow of 176.5 gpm through the oil separators whereas their design flow is 120 gpm. Several storm drains near the separators discharge into 002 outfall above the flow meter but this flow is not considered critical according to McGuire because of the small areas served by the drains.

In order to reduce the hydraulic loading to the separators, Deere is looking at two tributary streams which could possibly be removed. One is the emergency cooling water (city water) for the holding furnaces. The other is a stream which probably can't be removed due to the possibility of contamination with hydraulic oil should a heat exchanger leak develop. This is cooling water from the hydraulic system heat exchangers on the automatic molding machines. Reportedly the main source of oil entering 002 is from steam cleaning of parts.

As previously mentioned, high phenol was found in a sample of this effluent on June 18, 1980. During my initial inspection of this industry on September 18, 1979 industry people had advised that there was no phenol usage in the foundry. When questioned about this phenol excursion they indicated that there was some phenolic compound use in the cold box core process. The foundry has three other core processes, which include oil box, hot box and shell box. McGuire believed some core resin may have been spilled into a floor drain to cause this.

DISCHARGE 003: The discharge from the lagoon had a slight black tint. The dust collector clarifier was not inspected. It reportedly has been in service for the past six months following some vacuum pump repairs last fall.

OIL LAGOONS: These two lagoons were discharging at a rate estimated to be around 10 gpm. Light visible oil was present in the discharge from the northernmost of the two lagoons. This discharge enters the same ditch as does Outfall 003.

A second lagoon known as the South Lagoon discharges into the North Lagoon. The South Lagoon contains a turned down outlet pipe and the surface of this lagoon contained heavy red-brown oil. The discharge to the North Lagoon contained obvious visible oil.

These two oil lagoons used to be owned by the Rock Island Railroad which apparently has been declared to be defunct according to Mr. Foss. They are on Deere property and Deere used to feel that they were the responsibility of the Rock Island Railroad and apparently had an agreement to that effect with the railroad. The old Rock Island Railroad Silvis yards have reportedly been purchased by a company known as

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the Chrome Crankshaft Company of Melrose Park, Illinois, who is using the facilities to rebuild railroad car undercarriages, according to Mr. Foss. Foss indicated that Deere might try to get this Chrome Crankshaft Company to do something with the oil lagoons. Since they are on Deere's property it would seem that they would be Deere's responsibility.

TRANSFORMER DECONTAMINATION STATUS: Mr. McGuire indicated that a company known as Power Transformer Services of Somers, Wisconsin had installed on-site filtering equipment for removing PCB contamination from the mineral oil present in the furnace transformers. This filtering process has been going on for the past seven to eight months and is expected to be completed in about three months.

The above is submitted to document this inspection. An appropriate letter is being directed to Deere.



James E. Kammueler

JEK/l1v/pm

Att: -April 21, 1980 Inspection
 Letter w/Comments
 -Form 3560-3

cc: -DWPC/Permits-Ind. Unit
 -DWPC/Standards
 -Peoria Files
 -DLPC/Region 1

NPDES COMPLIANCE INSPECTION REPORT (Coding Instructions on back of last page)

TRANSACTION CODE	NPDES			YR	MO	DA	TYPE	INSPEC-TOR	FAC TYPE	TIME	
1 5	1	2	3	11	12	17	18	19	20	a.m. p.m.	
				8	10	3	12	C	S	2	
21	REMARKS										64

21 ADDITIONAL
Direct Environmental Questions to: Mike McGuire (309) 752-5370
To Arrange Inspections Contact: Don Williams (309) 752-6822

SECTION A - Permit Summary

NAME AND ADDRESS OF FACILITY (Include County, State and ZIP code)				EXPIRATION DATE
John Deere Foundry 14th Ave. & Highway 84 East Moline, IL 61244				6-30-81
				ISSUANCE DATE
				1-10-79
RESPONSIBLE OFFICIAL	TITLE			PHONE
Robert Chaney	General Manager			309-752-6838
FACILITY REPRESENTATIVE	TITLE			PHONE
Robert Knoblock	WWTP Foreman			309-752-6127

SECTION B - Effluent Characteristics (Additional sheets attached Yes, (for 003))

PARAMETER/OUTFALL 003	MINIMUM	AVERAGE	MAXIMUM	ADDITIONAL
BOD	SAMPLE MEASUREMENT	5.6	8.7	Data from 1-81 DMR
	PERMIT REQUIREMENT	20	50	
TSS	SAMPLE MEASUREMENT	5.9	14.4	
	PERMIT REQUIREMENT	25	62	
Temp. °C	SAMPLE MEASUREMENT	19.8	26	
	PERMIT REQUIREMENT	RULE 203(i)		
OIL	SAMPLE MEASUREMENT	≤1.0	3.3	3.0
	PERMIT REQUIREMENT	15	30	
pH	SAMPLE MEASUREMENT	7.6	8.1	
	PERMIT REQUIREMENT	6	9	

SECTION C - Facility Evaluation (S = Satisfactory, U = Unsatisfactory, N/A = Not applicable) M=Marginal; I=Indeterminate

<input type="checkbox"/> EFFLUENT WITHIN PERMIT REQUIREMENTS	M OPERATION AND MAINTENANCE	<input type="checkbox"/> SAMPLING PROCEDURES
<input checked="" type="checkbox"/> RECORDS AND REPORTS	N/A COMPLIANCE SCHEDULE	<input type="checkbox"/> LABORATORY PRACTICES
<input type="checkbox"/> PERMIT VERIFICATION	M FLOW MEASUREMENTS	OTHER:

SECTION D - Comments

SIGNATURES	AGENCY	DATE	ENFORCEMENT DIVISION USE ONLY
INSPECTED BY <i>James E. Kammereller</i>	IEPA	3-12-81	COMPLIANCE STATUS
INSPECTED BY			<input type="checkbox"/> COMPLIANCE
REVIEWED BY <i>James E. Kammereller for KEP</i>	IEPA	3-27-81	<input type="checkbox"/> NONCOMPLIANCE

SECTION B - Effluent Characteristics (Additional sheets attached) No

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Sections F thru L: Complete on all inspections, as appropriate. N/A = Not Applicable		PERMIT NO. IL0002992	
SECTION F - Facility and Permit Background			
ADDRESS OF PERMITTEE IF DIFFERENT FROM FACILITY <i>(Including City, County and ZIP code)</i>	DATE OF LAST PREVIOUS INVESTIGATION BY EPA/STATE 3-12-80		
	FINDINGS See 3-12-80 Inspection Report		
SECTION G - Records and Reports			
RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A <i>(Further explanation attached No)</i>			
DETAILS:			
(a) ADEQUATE RECORDS MAINTAINED OF:			
(i) SAMPLING DATE, TIME, EXACT LOCATION	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(ii) ANALYSES DATES, TIMES	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(iii) INDIVIDUAL PERFORMING ANALYSIS	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(iv) ANALYTICAL METHODS/TECHNIQUES USED	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(v) ANALYTICAL RESULTS <i>(e.g., consistent with self-monitoring report data)</i>	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(b) MONITORING RECORDS <i>(e.g., flow, pH, D.O., etc.)</i> MAINTAINED FOR A MINIMUM OF THREE YEARS INCLUDING ALL ORIGINAL STRIP CHART RECORDINGS <i>(e.g. continuous monitoring instrumentation, calibration and maintenance records)</i> .			
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(c) LAB EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS KEPT.			
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(d) FACILITY OPERATING RECORDS KEPT INCLUDING OPERATING LOGS FOR EACH TREATMENT UNIT. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(e) QUALITY ASSURANCE RECORDS KEPT. <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(f) RECORDS MAINTAINED OF MAJOR CONTRIBUTING INDUSTRIES <i>(and their compliance status)</i> USING PUBLICLY OWNED TREATMENT WORKS. <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
SECTION H - Permit Verification			
INSPECTION OBSERVATIONS VERIFY THE PERMIT. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <i>(Further explanation attached Yes)</i>			
DETAILS: Incorrect BOD/TSS Limits for 002-Need 10/12. Also Need Phenol Limi			
(a) CORRECT NAME AND MAILING ADDRESS OF PERMITTEE. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(b) FACILITY IS AS DESCRIBED IN PERMIT. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(c) PRINCIPAL PRODUCT(S) AND PRODUCTION RATES CONFORM WITH THOSE SET FORTH IN PERMIT APPLICATION. <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(d) TREATMENT PROCESSES ARE AS DESCRIBED IN PERMIT APPLICATION. <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(e) NOTIFICATION GIVEN TO EPA/STATE OF NEW, DIFFERENT OR INCREASED DISCHARGES. <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(f) ACCURATE RECORDS OF RAW WATER VOLUME MAINTAINED. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(g) NUMBER AND LOCATION OF DISCHARGE POINTS ARE AS DESCRIBED IN PERMIT. Oil Lagoons <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A			
(h) CORRECT NAME AND LOCATION OF RECEIVING WATERS. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(i) ALL DISCHARGES ARE PERMITTED. Oil Lagoons <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A			
SECTION I - Operation and Maintenance			
TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED. <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A <i>(Further explanation attached Yes)</i>			
DETAILS: Need Some O&M Improvements			
(a) STANDBY POWER OR OTHER EQUIVALENT PROVISIONS PROVIDED. Plant Shuts Down* <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A			
(b) ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(c) REPORTS ON ALTERNATE SOURCE OF POWER SENT TO EPA/STATE AS REQUIRED BY PERMIT. <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A			
(d) SLUDGES AND SOLIDS ADEQUATELY DISPOSED. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(e) ALL TREATMENT UNITS IN SERVICE. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(f) CONSULTING ENGINEER RETAINED OR AVAILABLE FOR CONSULTATION ON OPERATION AND MAINTENANCE PROBLEMS. Staff <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(g) QUALIFIED OPERATING STAFF PROVIDED. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(h) ESTABLISHED PROCEDURES AVAILABLE FOR TRAINING NEW OPERATORS. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(i) FILES MAINTAINED ON SPARE PARTS INVENTORY, MAJOR EQUIPMENT SPECIFICATIONS, AND PARTS AND EQUIPMENT SUPPLIERS. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(j) INSTRUCTIONS FILES KEPT FOR OPERATION AND MAINTENANCE OF EACH ITEM OF MAJOR EQUIPMENT. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(k) OPERATION AND MAINTENANCE MANUAL MAINTAINED. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(l) SPCC PLAN AVAILABLE. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(m) REGULATORY AGENCY NOTIFIED OF BY PASSING. <i>(Dates)</i> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A			
(n) ANY BY-PASSING SINCE LAST INSPECTION. Of Clarifier <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
(o) ANY HYDRAULIC AND/OR ORGANIC OVERLOADS EXPERIENCED. Clarifier <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			

PERMIT NO.

IL0002992

SECTION J - Compliance Schedules

PERMITTEE IS MEETING COMPLIANCE SCHEDULE. YES NO N/A (Further explanation attached _____)

CHECK APPROPRIATE PHASE(S).

- (a) THE PERMITTEE HAS OBTAINED THE NECESSARY APPROVALS FROM THE APPROPRIATE AUTHORITIES TO BEGIN CONSTRUCTION.
- (b) PROPER ARRANGEMENT HAS BEEN MADE FOR FINANCING (mortgage commitments, grants, etc.).
- (c) CONTRACTS FOR ENGINEERING SERVICES HAVE BEEN EXECUTED.
- (d) DESIGN PLANS AND SPECIFICATIONS HAVE BEEN COMPLETED.
- (e) CONSTRUCTION HAS COMMENCED.
- (f) CONSTRUCTION AND/OR EQUIPMENT ACQUISITION IS ON SCHEDULE.
- (g) CONSTRUCTION HAS BEEN COMPLETED.
- (h) START-UP HAS COMMENCED.
- (i) THE PERMITTEE HAS REQUESTED AN EXTENSION OF TIME.

SECTION K - Self-Monitoring Program

Part I - Flow measurement (Further explanation attached Yes)

PERMITTEE FLOW MEASUREMENT MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT.
DETAILS: See Inspection Memo YES NO N/A

(a) PRIMARY MEASURING DEVICE PROPERLY INSTALLED.

 YES NO N/ATYPE OF DEVICE: WEIR PARSHALL FLUME MAGMETER VENTURI METER OTHER (Specify) Inductance

(b) CALIBRATION FREQUENCY ADEQUATE. (Date of last calibration _____)

 YES NO N/A

(c) PRIMARY FLOW MEASURING DEVICE PROPERLY OPERATED AND MAINTAINED.

 YES NO N/A

(d) SECONDARY INSTRUMENTS (totalizers, recorders, etc.) PROPERLY OPERATED AND MAINTAINED.

 YES NO N/A

(e) FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGES OF FLOW RATES.

 YES NO N/A

Part 2 - Sampling (Further explanation attached No)

(002)

PERMITTEE SAMPLING MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT.

 YES NO N/A

DETAILS: Not Collecting Math. Comp. for Oil-Just 24 hr. Comp.

(a) LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.

 YES NO N/A

(b) PARAMETERS AND SAMPLING FREQUENCY AGREE WITH PERMIT. Not Monitoring 001

 YES NO N/A

(c) PERMITTEE IS USING METHOD OF SAMPLE COLLECTION REQUIRED BY PERMIT.

 YES NO N/AIF NO, GRAB MANUAL COMPOSITE AUTOMATIC COMPOSITE FREQUENCY

(d) SAMPLE COLLECTION PROCEDURES ARE ADEQUATE.

 YES NO N/A

(i) SAMPLES REFRIGERATED DURING COMPOSITING

 YES NO N/A

(ii) PROPER PRESERVATION TECHNIQUES USED

 YES NO N/A

(iii) FLOW PROPORTIONED SAMPLES OBTAINED WHERE REQUIRED BY PERMIT

 YES NO N/A

(iv) SAMPLE HOLDING TIMES PRIOR TO ANALYSES IN CONFORMANCE WITH 40 CFR 136.3

 YES NO N/A

(e) MONITORING AND ANALYSIS BEING PERFORMED MORE FREQUENTLY THAN REQUIRED BY PERMIT.

 YES NO N/A

(f) IF (e) IS YES, RESULTS ARE REPORTED IN PERMITTEE'S SELF-MONITORING REPORT.

 YES NO N/A

Part 3 - Laboratory (Further explanation attached No)

PERMITTEE LABORATORY PROCEDURES MEET THE REQUIREMENTS AND INTENT OF THE PERMIT.

 YES NO N/A

DETAILS:

(a) EPA APPROVED ANALYTICAL TESTING PROCEDURES USED. (40 CFR 136.3)

 YES NO N/A

(b) IF ALTERNATE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED.

 YES NO N/A

(c) PARAMETERS OTHER THAN THOSE REQUIRED BY THE PERMIT ARE ANALYZED.

 YES NO N/A

(d) SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT.

 YES NO N/A

(e) QUALITY CONTROL PROCEDURES USED.

 YES NO N/A

(f) DUPLICATE SAMPLES ARE ANALYZED. 100 % OF TIME. TSS

 YES NO N/A

(g) SPIKED SAMPLES ARE USED. % OF TIME.

 YES NO N/A

(h) COMMERCIAL LABORATORY USED.

 YES NO N/A

(i) COMMERCIAL LABORATORY STATE CERTIFIED.

 YES NO N/A

*Done By Staff - Factory Man Comes Once Every 1-2 Years

LAB NAME _____

LAB ADDRESS _____ Beling Labs, Moline

							PERMIT NO IL0002992
SECTION L - Effluent/Receiving Water Observations (Further explanation attached Yes)							
OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	VISIBLE FLOC AT SOL	COLOR	OTHER
003	Yes					Gray	
005		-		-	-	Black Tint	
001	-----No Obvious Flow-----						

(Sections M and N: Complete as appropriate for sampling inspections)

SECTION M - Sampling Inspection Procedures and Observations (Further explanation attached _____)

- GRAB SAMPLES OBTAINED
- COMPOSITE OBTAINED
- FLOW PROPORTIONED SAMPLE
- AUTOMATIC SAMPLER USED
- SAMPLE SPLIT WITH PERMITTEE
- CHAIN OF CUSTODY EMPLOYED
- SAMPLE OBTAINED FROM FACILITY SAMPLING DEVICE

COMPOSITING FREQUENCY _____ PRESERVATION _____

SAMPLE REFRIGERATED DURING COMPOSITING: YES NO

SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE _____

SECTION N - Analytical Results (Attach report if necessary)

Illinois Environmental Protection Agency



5415 N University
Peoria IL 61614

April 21, 1980

**ROCK ISLAND COUNTY - John Deere Foundry
(East Moline) Compliance Evaluation Inspection**

Mr. Don Williams, Manager of Engineering
John Deere Foundry
14th Ave. and Highway 64
E. Moline, Illinois 61240

Dear Mr. Williams:

On March 12, 1980, James E. Kammueler and Jeffrey L. Rader representing this Agency conducted an inspection of your wastewater discharges and treatment facilities. Messrs. Ralph Foss, Don Williams, Bob Knobloch, Bruce McHaney, and Steve Hodge were contacted at the time of the visit. Based on this inspection and a review of our files, the following apparent violations of the Illinois Environmental Protection Act (the Act) and the Illinois Pollution Control Board Rules and Regulations, "Chapter 3 Water Pollution", (Chapter 3) or your National Pollutant Discharge Elimination System (NPDES) Permit #IL00C2992 were noted.

APPARENT VIOLATIONS

- PLAINTIFF - MATT L.
DEFENDANT - SUGAR CREEK
APPLY FOR
JANUARY 26

NO ALLEGED
PRACTICING
DURING
INSPECTION

SAME
ELIMINATE
WILL ELIMINATE
THIS SOON

ACTEN
CALLED 2/1

 1. The foundry effluent discharges 002 and 003 were elevating the temperature in the two (2) tributaries of Sugar Creek which they enter, and in Sugar Creek itself, to above the maximum 50°F above background allowed under Rule 203(i) of Chapter 3 and your NPDES Permit.
 2. Solids deposits were present at the base of outfall 001 and in the receiving stream downstream of the outfall, indicating that at times this discharge contains settleable solids in apparent violation of Rule 403 of Chapter 3.
 3. Discharge 001 was not being routinely monitored as required by your NPDES Permit. It was apparently discharging at the time of the inspection based on flow and temperature observations. Our records indicate this outfall, as a minimum, receives air conditioner water and also cooling water from the air tempering unit heat exchangers.
 4. Inadequate flow measuring equipment was provided for outfall 003 and no equipment was provided for outfall 001. Flow readings are required by your NPDES Permit.

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SANIS 5. "Visible oil was present in discharge 002 in apparent violation of Rule 403 of Chapter 3.

MEREDITH
INSPECTED
C 8-80 6. Flow measurements were not being taken at outfall 002; only estimated readings were being made.

Please submit a written response to this office within ten (10) days of the date of this letter outlining the reasons for the above apparent violations as well as a description of the action you plan to take to correct and prevent further recurrence of these apparent violations.

Further, take notice that non-compliance with the provisions of your NPDES Permit including excursions from the limits required by your NPDES Permit may be the subject of enforcement action pursuant to Section 11(f) of the Illinois Environmental Protection Act, Ch. III 1/2 Ill. Rev. Stat., Sec. 1012(f) (1975).

OPERATION AND MAINTENANCE ITEMS

During the inspection our representative also observed several operation and maintenance items which deserve attention. The following is a list of recommendations for handling these items (as well as some suggestions for dealing with certain of the above mentioned violations).

1. Provide additional cooling for effluents 002 and 003 prior to discharge.
2. Discontinue the use of outfall 001 for the intermittent discharge of effluent from the wet scrubber treatment system. The scrubber treatment system does not produce an effluent which consistently meets the .15 mg/l of Rule 408 of Chapter 3 and use of cooling water (dilution) to assist in meeting effluent standards is not allowed under Rule 401 of Chapter 3.
3. Determine the nature and source of all flows entering outfall 001 and monitor as required when discharging.
4. Provide equipment to enable the taking of "grab" flow readings at outfalls 001 and 003. Your proposal to estimate outfall 003 flows based on well water consumption minus outfall 002 flow readings does not account for the apparent continuous, or near continuous, flow from outfall 001 and will not take into account any losses by evaporation particularly when the proposed cooling towers are placed into operation.

5. Keep the surface of the 002 oil separators free of oil by increasing oil removal and cleaning frequencies. Operating logs should also be kept on these units. JUST HAVE RECORDS OF OIL REMOVAL BY SCAVENGER
6. Minimize bypassing and down-time and improve the operational reliability and effluent quality of the wet scrubber treatment system by providing the following changes:

- a. A larger recirculation tank to minimize surcharging and bypassing of the tank during heavier flow periods.

PERMIT
APPLICATION
SUBMITTED TO ADD 3 CYCLONES AND A
RECIRCULATION TANK

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- No b. Standby duplicate solids dewatering equipment.
No c. Duplicate cyclone pumps.
No d. A complete spare parts inventory for the facilities.

IN SITE
DECONTAMINATION
UNDERWAT

- e. Take action as needed to eliminate the potential for discharge of PCB compounds to outfall 002, or any other outfall, from anywhere in the plant under any conditions. For example, it appears that two (2) or three (3) of the furnace transformers may contain PCB coolant, but that spill containment facilities have sufficient capacity to hold the contents of only one transformer.
- f. Obtain a NPDES Permit modification if the proposed cooling towers are installed. This is necessary because these towers could possibly change the nature of your cooling water discharge in regard to dissolved solids and chemical additives.

If you have any questions or comments regarding this letter, please feel free to contact Mr. Kammueller of this office.

Very truly yours,

ENVIRONMENTAL PROTECTION AGENCY


Kenneth C. Merideth
Kenneth C. Merideth, Manager
Peoria Office, Region 5
Div. of Water Pollution Control

JEK/pm

cc: -Robert Chaney, General Manager
-Ralph Grotelueschen
-Rock Island Co. Health Dept.

bcc: -DWPC/POS and RU
-DWPC/Permit Sect.-Ind. Unit
-DWPC/Enforcement
Peoria Files

**TO BE COMPLETED BY
WASTE GENERATOR**

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
2200 CHURCHILL ROAD, SPRINGFIELD, ILLINOIS 62706
(217) 782-6760
SPECIAL WASTE HAULING MANIFEST

Authorization Number 630810
8

John Deere Foundry
(Company Name)
East Moline
City

Ivy. 34 & 14th Ave. 3097526046
Address Illinois Zip 61244
State

1610250005
14 Generator Number I LD 075607119
EPA Number

WASTE HAULER(S)

Peoria Disposal Co.
Hauler Name

1113 N. Swords Ave., Peoria, IL 61604
Hauler Address

S.W.H. Registration Number 0082
25
I LD 00984819
EPA Number

Hauler Name

Hauler Address

S W H. Registration Number 32

Phone Number

EPA Number

DESTINATION — DISPOSAL STORAGE OR TREATMENT SITE

Peoria Disposal Co.
(Facility Name)

4349 Southport Rd.

14381203

Address

39

Site Number

Peoria

City

Illinois

State

61615

Zip

309-675-4393

Phone Number

I LD 00080581

EPA Number

Alternate Facility Name

Address

39

Site Number

City

State

Zip

Phone Number

EPA Number

**TO BE COMPLETED BY
WASTE GENERATOR**

WASTE NAME **Electric Arc Furnace Dust from Iron Melting** WASTE PHASE **Solid**

(Liquid, Gaseous, Solid)

SPECIAL WASTE BEING TRANSPORTED UNDER THIS MANIFEST IS OF THE DOT HAZARD CLASSIFICATION INDICATED IMMEDIATELY BELOW

SHIPPING DESCRIPTION

HAZARD CLASS

Hazardous Waste
Solid N.O.S.

ORM-E

N A 9 1 8 9

UN or NA Number

D 0 0 6 , D 0 0 8

EPA HW Number

WEIGHT FOR
DOT USE

LBS
TONS (Circle One)

WEIGHT FOR I.E.P.A. USE MUST BE
CONVERTED TO C.J. YDS. OR GAL

QUANTITY OF WASTE DELIVERED

47

0 0 0 / 5

52

1 GALLONS (Circle One)
2 CU. YDS

2

53

METHOD OF SHIPMENT (Circle One)

(DRUMS _____)
Number

TANK TRUCK

OPEN TRUCK

OTHER (Specify)

THIS IS TO CERTIFY THAT THE ABOVE-NAMED WASTE ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND IS IN PROPER CONDITION FOR TRANSPORTATION IN ACCORDANCE WITH THE APPLICABLE REGULATIONS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND I.E.P.A.

I HEREBY AGREE TO AND CERTIFY THE ABOVE WRITTEN INFORMATION

(Authorized Signature)

DATE

WASTE HAULER

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED WASTE AND QUANTITY HAS BEEN ACCEPTED IN PROPER CONDITION FOR TRANSPORT AND I ACKNOWLEDGE THE DESTINATION AS INDICATED

(1)

(Authorized Signature)

DATE

54

(2)

(Authorized Signature)

DATE

55

DISPOSAL, STORAGE OR TREATMENT FACILITY*

HAZARDOUS WASTE SUBJECT TO FEE YES NO

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED WASTE AND INDICATED QUANTITY HAS BEEN ACCEPTED AT THE SITE SPECIFIED ABOVE

(Authorized Signature)

DATE

56

COMMENTS OR SPECIAL INSTRUCTIONS

IN ILLINOIS 217 / 782-6631

DISTRIBUTION PART 1 GEN. GENERATOR

PART 2 EPA

PART 3 SITE

PART 4 HAULER

PART 5 PA

PART 6 GENERATOR

OUTSIDE ILLINOIS 800 / 421-8802 or 202 / 426

REV #4

GENERATOR COPY - PART 6

**TO BE COMPLETED BY
WASTE GENERATOR**

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
2200 CHURCHILL ROAD, SPRINGFIELD, ILLINOIS 62706
(217) 782-6760
SPECIAL WASTE HAULING MANIFEST

Authorization Number 630810

<u>John Deere Foundry</u> (Company Name)	<u>May 84 s 14th Ave</u> Address	<u>3097526046</u> Phone Number	<u>1610250005</u> 14 Generator Number
<u>East Moline</u> City	<u>Illinois</u> State	<u>61244</u> Zip	<u>IL0075607119</u> EPA Number

WASTE HAULER(S)

<u>Peoria Disposal Co.</u> Hauler Name	<u>1113 N. Swords Ave, Peoria, IL 61604</u> Hauler Address	<u>309675176</u> Phone Number	<u>0082</u> S.W.H. Registration Number
<u>Hauler Name</u>	<u>Hauler Address</u>	<u>Phone Number</u>	<u>IL0009848193</u> EPA Number
<u>Peoria Disposal Co.</u> (Facility Name)	<u>4349 Southport Rd.</u> Address	<u>3096764893</u> Phone Number	<u>14381203</u> 39 Site Number
<u>Peoria, IL</u> City	<u>Illinois</u> State	<u>61615</u> Zip	<u>ILD00080581</u> EPA Number
<u>Alternate Facility Name:</u>	<u>Address</u>	<u>Phone Number</u>	<u>Site Number</u>
<u>City</u>	<u>State</u>	<u>Zip</u>	<u>EPA Number</u>

**TO BE COMPLETED BY
WASTE GENERATOR**

WASTE NAME Electric Arc Furnace Dust From Iron Melting **WASTE PHASE** Solid
 THIS SPECIAL WASTE BEING TRANSPORTED UNDER THIS MANIFEST IS OF THE DOT HAZARD CLASSIFICATION INDICATED IMMEDIATELY BELOW

SHIPPING DESCRIPTION Hazardous Waste Solid N.O.S.	HAZARD CLASS CRM-E	NA9189 UN or NA Number	0006,0006 EPA HW Number
--	-------------------------------------	----------------------------------	-----------------------------------

WEIGHT FOR DOT USE	LBS TONS (Circle One)	WEIGHT FOR EPA USE MUST BE CONVERTED TO CU YDS. OR GAL.	QUANTITY OF WASTE DELIVERED	000 47 _____ 52 _____ 1 GALLONS (Circle One) 2 CU YDS 2 53 _____
METHOD OF SHIPMENT (Circle One)		(DRUMS _____ Number)	TANK TRUCK	OPEN TRUCK OTHER (Specify) _____

THIS IS TO CERTIFY THAT THE ABOVE-NAMED WASTE ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED AND IS IN PROPER CONDITION FOR TRANSPORTATION, IN ACCORDANCE WITH THE APPLICABLE REGULATIONS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND U.S.E.P.A.

I HEREBY AGREE TO AND CERTIFY THE ABOVE WRITTEN INFORMATION _____ DATE _____
 (Authorized Signature)

WASTE HAULER HEREBY CERTIFY THAT THE ABOVE-DESCRIBED WASTE AND QUANTITY HAS BEEN ACCEPTED IN PROPER CONDITION FOR TRANSPORT AND I ACKNOWLEDGE THE DESTINATION AS INDICATED

(1) _____ (Authorized Signature)	DATE <u> / / </u> 54 _____
(2) _____ (Authorized Signature)	DATE <u> / / </u>

DISPOSAL, STORAGE OR TREATMENT FACILITY* HAZARDOUS WASTE SUBJECT TO FEE YES _____ NC _____
 I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED WASTE AND INDICATED QUANTITY HAS BEEN ACCEPTED AT THE SITE SPECIFIED ABOVE
 _____ DATE / /
 (Authorized Signature)

COMMENTS OR SPECIAL INSTRUCTIONS: _____

IN ILLINOIS 217 / 782-6760
 DISTRIBUTION PART 1 GENERATOR PART 2 PREP PART 3 STF PART 4 HAULER PART 5 EPA PART 6 GENERATOR
 REV. #4

STATE OF ILLINOIS

TO BE COMPLETED BY
WASTE GENERATORENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
2200 CHURCHILL ROAD, SPRINGFIELD, ILLINOIS 62706
(217) 782-6760
SPECIAL WASTE HAULING MANIFESTAuthorization Number 630810

John Deere Foundry
(Company Name)

East Moline
City

Ivy. 84 & 14th Ave.
Address

Illinois 61244
State Zip

309-752-6046
Phone Number

1610250005
14 Generator Number
ILD075607119
EPA Number

WASTE HAULER(S)

Peoria Disposal Co. 1113 N. Swords Ave., Peoria, IL 61604S.W.H. Registration Number 0082
25

Hauler Name

Hauler Address

309-674-5176

Phone Number

ILD00984819
EPA Number

Hauler Name

Hauler Address

Phone Number

EPA Number

Peoria Disposal Co.4349 Southport Rd.14381203

(Facility Name)

Address

PeoriaIllinois61615309-676-4893ILD00080581

City

State

Zip

Phone Number

EPA Number

Alternate (Facility Name)

Address

39 Site Number

City

State

Zip

Phone Number

EPA Number

TO BE COMPLETED BY
WASTE GENERATORWASTE NAME Electric Arc Furnace Duct From Iron Melting

WASTE PHASE

Solid

(Liquid, Gaseous, Solid)

SPECIAL WASTE BEING TRANSPORTED UNDER THIS MANIFEST IS OF THE DOT HAZARD CLASSIFICATION INDICATED IMMEDIATELY BELOW

SHIPPING DESCRIPTION

HAZARD CLASS

N A 9 1 8 9D 0 0 6 , D 0 0 8Hazardous WasteSolid N. O. S.O C I - E

UN or NA Number

EPA HW Number

WEIGHT FOR
D.O.T. USE

LBS.

TONS (Circle One)

WEIGHT FOR EPA USE MUST BE
CONVERTED TO CU. YDS. OR GAL.

QUANTITY OF WASTE DELIVERED

47

0 0 0 0 0 1 5

52

1 GALLONS (Circle 1)
CU. YDS. (Circle 2)

53

METHOD OF SHIPMENT (Circle One)

(DRUMS _____)

Number

TANK TRUCK

OPEN TRUCK

OTHER (Specify) _____

THIS IS TO CERTIFY THAT THE ABOVE-NAMED WASTE ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND IS IN PROPER CONDITION FOR TRANSPORTATION, IN ACCORDANCE WITH THE APPLICABLE REGULATIONS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND EPA.

I HEREBY AGREE TO AND CERTIFY THE ABOVE WRITTEN INFORMATION

9/2/83DATE: 9/2/83

(Authorized Signature)

WASTE HAULER

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED WASTE AND QUANTITY HAS BEEN ACCEPTED IN PROPER CONDITION FOR TRANSPORT AND I ACKNOWLEDGE
THE DESTINATION AS INDICATED(1) _____
(Authorized Signature)DATE 9/2/83
54(2) _____
(Authorized Signature)DATE 9/2/83
55

DISPOSAL, STORAGE, OR TREATMENT FACILITY*

HAZARDOUS WASTE SUBJECT TO FEE YES NO

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED WASTE AND INDICATED QUANTITY HAS BEEN ACCEPTED AT THE SITE SPECIFIED ABOVE.

(Authorized Signature)

DATE 9/2/83
60

COMMENTS OR SPECIAL INSTRUCTIONS _____

**TO BE COMPLETED BY
WASTE GENERATOR****STATE OF ILLINOIS**

ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
2200 CHURCHILL ROAD, SPRINGFIELD, ILLINOIS 62706
(217) 782-6760
SPECIAL WASTE HAULING MANIFEST

Authorization Number **6 3 0 8 1 0**

John Deere Foundry (Company Name)	Ewy. S4 & 14th Ave. Address	309-752-6046 Phone Number	1 6 1 0 2 5 0 0 0 5 Generator Number
East Moline City	Illinois 61244 State Zip		I L D 0 7 5 6 0 7 1 1 9 EPA Number

WASTE HAULER(S)

Peoria Disposal Co. Hauler Name	1113 N. Swords Ave., Peoria, IL 61604 Hauler Address	309-674-5176 Phone Number	0 0 8 2 S.W.H. Registration Number
---	--	-------------------------------------	--

Hauler Name	Hauler Address	Phone Number	S.W.H. Registration Number
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DESTINATION — DISPOSAL STORAGE OR TREATMENT SITE

Peoria Disposal Co. (Facility name)	4349 Southport Rd. Address	1 4 3 8 1 2 0 3 Site Number
Peoria City	Illinois 61615 State Zip	309-676-4893 Phone Number

Alternate (Facility Name)	Address	39	Site Number
City	State	Zip	Phone Number

TO BE COMPLETED BY WASTE GENERATOR	Electric Arc Furnace Dust from Iron Melting WASTE NAME	Solid WASTE PHASE
---------------------------------------	--	-----------------------------

SPECIAL WASTE BEING TRANSPORTED UNDER THIS MANIFEST IS OF THE DOT HAZARD CLASSIFICATION INDICATED IMMEDIATELY BELOW

SHIPPING DESCRIPTION Hazardous Waste Solid N. O. S.	HAZARD CLASS OFM-E	N A 9 1 8 9 UN or NA Number	D 0 0 6, D 0 0 8 EPA HW Number
---	------------------------------	---------------------------------------	--

WEIGHT FOR D.O.T. USE	LBS TONS (Circle One)	WEIGHT FOR I.E.P.A. USE MUST BE CONVERTED TO CU. YDS. OR GAL	QUANTITY OF WASTE DELIVERED 42	0 0 0 0 52	1 2 53	1 GALLONS (Circle One) 2 CU. YDS. 53
--------------------------	--------------------------	---	-----------------------------------	---------------	-----------	--

METHOD OF SHIPMENT (Circle One)	(DRUMS _____) Number	TANK TRUCK	OPEN TRUCK	OTHER (Specify)
---------------------------------	-------------------------	------------	------------	-----------------

THIS IS TO CERTIFY THAT THE ABOVE-NAMED WASTE ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND IS IN PROPER CONDITION FOR TRANSPORTATION IN ACCORDANCE WITH THE APPLICABLE REGULATIONS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND I.E.P.A.

I HEREBY AGREE TO AND CERTIFY THE ABOVE WRITTEN INFORMATION John Deere Foundry (Authorized Signature) DATE _____

WASTE HAULER I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED WASTE AND QUANTITY HAS BEEN ACCEPTED IN PROPER CONDITION FOR TRANSPORT AND I ACKNOWLEDGE THE DESTINATION AS INDICATED:

(1) _____ (Authorized Signature) DATE 54 / / _____

(2) _____ (Authorized Signature) DATE 54 / / _____

DISPOSAL, STORAGE, OR TREATMENT FACILITY* HAZARDOUS WASTE SUBJECT TO FEE YES _____ NO _____

I HEREBY CERTIFY THAT THE ABOVE DESCRIBED WASTE AND INDICATED QUANTITY HAS BEEN ACCEPTED AT THE SITE SPECIFIED ABOVE

(Authorized Signature) DATE 60 / / _____

COMMENTS OR SPECIAL INSTRUCTIONS _____

IN ILLINOIS 217 / 782-6637	OUTSIDE ILLINOIS 800 / 424-8802 or 202 / 426-22				
DISTRIBUTION PART 1: GENERATOR	PART 2: EPA	PART 3: SITE	PART 4: HAULER	PART 5: EPA	PART 6: GENERATOR

TO BE COMPLETED BY
WASTE GENERATOR

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
2200 CHURCHILL ROAD, SPRINGFIELD, ILLINOIS 62706
(217) 782-6760
SPECIAL WASTE HAULING MANIFEST

Authorization Number 630310
8

John Deere Foundry Hwy. 34 & 14th Ave. 309-752-6046 1610250005
(Company Name) Address Phone Number Generator Number
East Moline Illinois 61244 ILD075607119
City State Zip EPA Number

WASTE HAULER(S)

Peoria Disposal Co. 1113 N. Swords Ave., Peoria, IL 61604 S W H Registration Number 0082
Hauler Name Hauler Address 25
309-674-5176 Phone Number ILD009848193
EPA Number

Hauler Name Hauler Address S W H. Registration Number 32
Phone Number EPA Number

DESTINATION — DISPOSAL STORAGE OR TREATMENT SITE
Peoria Disposal Co. 4349 Southport Rd. 14381203
(Facility Name) Address Site Number 39
Illinois 61615 309-676-4393 ILDO0080581
City State Zip EPA Number

Alternate (Facility Name) Address 39 Site Number
City State Zip EPA Number

TO BE COMPLETED BY
WASTE GENERATOR Electric Arc Furnace Dust
WASTE NAME from Iron Melting WASTE PHASE Solid
SPECIAL WASTE BEING TRANSPORTED UNDER THIS MANIFEST IS OF THE DOT HAZARD CLASSIFICATION INDICATED IMMEDIATELY BELOW (Liquid, Gaseous, Solid)

SHIPPING DESCRIPTION HAZARD CLASS H A 9 1 0 9 D O O 6 , D O O 8
Hazardous Waste 4 R E - S UN or NA Number EPA HW Number
Solid N. O. S. 47 52
WEIGHT FOR 0 0 0 1 5 1 GALLONS (Circle One)
DO NOT USE 0 LBS 0 TDS (Tonnes Metric) 2 CU YDS
QUANTITY OF WASTE DELIVERED 47 53
METHOD OF SHIPMENT (Circle One) DRUMS OTHER (Specify)
Number TANK TRUCK OPEN TRUCK

THIS IS TO CERTIFY THAT THE ABOVE-NAMED WASTE ARE PROPERLY CLASSIFIED, PACKAGED, MARKED AND LABELED AND IS IN PROPER CONDITION FOR TRANSPORTATION
IN ACCORDANCE WITH THE APPLICABLE REGULATIONS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND EPA.

I HEREBY AGREE TO AND CERTIFY THE ABOVE WRITTEN INFORMATION
(Authorized Signature) DATE 6 Sept 83

WASTE HAULER

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED WASTE AND QUANTITY HAS BEEN ACCEPTED IN PROPER CONDITION FOR TRANSPORT AND I ACKNOWLEDGE
THE DESTINATION AS INDICATED

(1) _____
(Authorized Signature)

DATE 2/12/83

(2) _____
(Authorized Signature)

DATE 1/1/83

DISPOSAL, STORAGE, OR TREATMENT FACILITY*

HAZARDOUS WASTE SUBJECT TO FEE YES NO

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED WASTE AND INDICATED QUANTITY HAS BEEN ACCEPTED AT THE SITE SPECIFIED ABOVE

(Authorized Signature)

DATE 1/1/83

COMMENTS OR SPECIAL INSTRUCTIONS

ILLINOIS 217-782-6760

DISTRIBUTION PART 1 GENERATOR

REV #4

PAB TEPAA FAX 6760

PART 2 HAULER

PAB TEPAA

PART 3 HAULER

PAB TEPAA

PART 4 GENERATOR

OUTSIDE ILLINOIS 800-124-8802 or 202-425-

STATE OF ILLINOIS

TO BE COMPLETED BY
WASTE GENERATORENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
2200 CHURCHILL ROAD, SPRINGFIELD, ILLINOIS 62706
(217) 782-6760
SPECIAL WASTE HAULING MANIFESTAuthorization Number 630810

John Deere Foundry (Company Name)	Hwy. 84 & 14th Ave. Address	309-752-6046 Phone Number	1610250005 Generator Number
East Moline, City	Illinois State	61244 Zip	ILD075607119 EPA Number

WASTE HAULER(S)

Peoria Disposal Co. Hauler Name	1113 N. Swords Ave., Peoria, IL 61604 Hauler Address	309-674-5176 Phone Number	008224 S.W.H. Registration Number
---	--	-------------------------------------	---

Peoria Disposal Co. Facility Name	4349 Southport Rd. Address	14381203 Site Number		
Peoria City	Illinois State	61615 Zip	309-676-4393 Phone Number	ILD00080581 EPA Number
Alternate Facility Name	Address	Phone Number	EPA Number	

Peoria Disposal Co. Facility Name	4349 Southport Rd. Address	14381203 Site Number		
Peoria City	Illinois State	61615 Zip	309-676-4393 Phone Number	ILD00080581 EPA Number
Alternate Facility Name	Address	Phone Number	EPA Number	

Peoria Disposal Co. Facility Name	4349 Southport Rd. Address	14381203 Site Number		
Peoria City	Illinois State	61615 Zip	309-676-4393 Phone Number	ILD00080581 EPA Number
Alternate Facility Name	Address	Phone Number	EPA Number	

TO BE COMPLETED BY WASTE GENERATOR	Electric Arc Furnace Dust WASTE NAME	Solid WASTE PHASE	
THE SPECIAL WASTE BEING TRANSPORTED UNDER THIS MANIFEST IS OF THE DOT HAZARD CLASSIFICATION INDICATED IMMEDIATELY BELOW			
HAZARD DESCRIPTION Hazardous Waste Solid N. O. S.	HAZARD CLASS ON-R	N A 9 1 3 9 UN OF RA Number	0 0 0 6 , 0 0 0 8 EPA HW Number
WEIGHT FOR DOT USE	WEIGHT FOR EPA USE MUST BE CONVERTED TO LB YDS OR GAL	QUANTITY OF WASTE DELIVERED	1 GALLON - Circle If 60 YDS 2 52
METHOD OF SHIPMENT (Circle One): DRUMS _____ per	TANK TRUCK OPEN TRUCK	OTHER (Specify)	

THIS IS TO CERTIFY THAT THE ABOVE-NAMED WASTE ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND IS IN PROPER CONDITION FOR TRANSPORTATION, IN ACCORDANCE WITH THE APPLICABLE REGULATIONS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND EPA.

I HEREBY AGREE TO AND CERTIFY THE ABOVE WRITTEN INFORMATION

(Signature) (Authorized Signature)

DATE 6 Sept 83

WASTE HAULER

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED WASTE AND QUANTITY HAS BEEN ACCEPTED IN PROPER CONDITION FOR TRANSPORT AND I ACKNOWLEDGE THE DESTINATION AS INDICATED

(1) _____
(Authorized Signature)DATE 6 Sept 83(2) _____
(Authorized Signature)DATE 6 Sept 83

DISPOSAL STORAGE, OR TREATMENT FACILITY*

HAZARDOUS WASTE SUBJECT TO FEE YES NO

I HEREBY CERTIFY THAT THE ABOVE-DESCRIBED WASTE AND INDICATED QUANTITY HAS BEEN ACCEPTED AT THE SITE SPECIFIED ABOVE

4. Authorized Signature

DATE 6 Sept 83

COMMENTS OR SPECIAL INSTRUCTIONS

ILLINOIS 17-76-937

LICENCED BY STATE OF ILLINOIS

REV. #4

PART 1 - Generator
PART 2 - Transporter
PART 3 - Hauler
PART 4 - Driver
PART 5 - Receiver
PART 6 - Generator

<u>letter</u>	<u>sec</u>	<u>total depth</u>	<u>drawing from</u>	<u>aquifer depth</u>	
BB	8 17N 1E	368	dolomite	345	
CC	8 17N 1E	254	niagra	185	
DD	8	172	Rock	150	
EE	8 ↓	325	niagra	164	subdivision H_2O supply
FF	8↓	235	lime	205	
GG	7 17N 1E	340	niagra	308	
HH	6 17N 1E	205		155	
II	31 18N 1E	432	rock		
JJ	31	414	niagra	330	
KK	32	1680			Silvis #3
LL	33	160	bkn limestone	144	
MM	33 ↓	95	rock	85	
NN	32	1985			Silvis Well
OO	32	442	maquoketa	434	Silvis Well

logs for
- 41 wells - not incl. industrial
City of Silvis - 5 logs

in aquifer < 160 feet deep \Rightarrow 18

$$18 \times 3.8 = 68.4 \text{ population}$$

using municipal supply for HRS
will score higher

<u>sec</u> <u>(RIE T&N)</u>	<u>depth</u>	<u>drawing from</u>	<u>ag. depth</u>	<u>dist. to site</u>
A 22	120	bkn limestone	48	2-3
B 22	300	bkn limestone	279	2-3
C 22	100	bkn limestone	50	2-3
D 22	140	lime rock	79	2-3
E 21	355	rock	68	
F 20	80	shale	40	
G 20	110	lime	78	
H 19	124	bkn limestone	55	
I 19	100	bkn limestone	38	
J 18	100	limestone	46-14?	
K 17	200	bkn limestone	176	
L 16	205	brown lime	143	
M 16	334	rock	260	
N 33	292	rock	240	
O 33	160	bkn limestone	144	
P 32	445	?	160	Si Silvis city well #8
Q 32	1680			Si Silvis #13
R 31	414	Niagra	330	
S 30	234	white limestone	210	
T 29	120	bkn. limestone	108	
U 28	140	Rock	96	
V 28	140	bkn. limestone	86	
W 28	102	bkn limestone	80	
X 34	120	limestone	50	
Y 33	77	limestone / sandstone		
Z 33	295	brown lime & Niagra	160	
KIA 33	95	rock	85	

SILVIS Municipal
well #8

P
ENCLAVE PLATE
FOR SURVEY SECTION. BE SURE TO

(2040-0002-15-64)

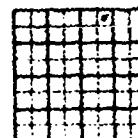
ILLINOIS GEOLOGICAL SURVEY, URBANA			
Permit #4885	Thickness	Top	Bottom
Topsoil	2	0	2
Shale	8	2	10
Sand and shale	12	10	22
Shale	16	22	38
Lime rock	32	38	70
Sand rock	14	70	84
			TD

Water from sand rock at 70 to 84'.
 Casing: 5" standard 0-47'.
 Size hole below casing: 5".
 Static level 18' below casing top which
 is 2' above ground level. Pumping
 level 50' when pumping at 10 gallons
 per minute for 4 hours.

Drilled for Durbin Landscaping.

NO ENVELOPE

CONTRACTOR Temple Drilling Company
 ADDRESS Durbin, James
 DATE DRILLED 1968
 CONTRACTOR'S NAME NO. 466
 ELEVATION
 LOCATION NE NW SE
 COUNTY ROCK ISLAND



33-18N-1E

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

Completed 4-25-69
 7050 Year 69
 10. Dept. Mines and Minerals permit No.
 11. Property owner Silvis
 Address 7050 18th Street
 Driller Temple License No. 72-30
 12. Water from 34 ft. at depth 180 to 644 ft.
 13. County ROCK ISLAND
 14. Screen: Diam. 32 in. Sec. 32
 Length: 4 ft. Slot 1B N
 15. Casing and Liner Pipe Ring 1E
 Elevation 65' SL, 80' EL of SW NW NW (permit)
 16. Size Hole below casing: 12 in.
 17. Static level 90.5 ft. below casing top which is 3 ft.
 above ground level. Pumping level 3.0 ft. when pumping at 275 gpm for 12 hours.

18. FORMATIONS PASSED THROUGH

DESCRIPTION	THICKNESS	DEPTH OF BOTTOM
Sand (fine to very fine)	30	30
Silt/clay/siltstone (fine to medium)	90	120
Silt stone (buff)	150	300
White	75	375
Knife border	70	445

* Municipal water supply
 (CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Harry E. Waidlow DATE 4/29/69

ROCK ISLAND COUNTY NO. 466 S.S. # 56953
 33-18N-1E

Silvis #3

Page 2

ILLINOIS GEOLOGICAL SURVEY, URBANA

Depth	Thickness	Top	Bottom
Brown dolomite	60	1620	1680
Finished in sandstone.			TD
Cased with 24" from 0-119' 6".			
18" cemented from 0-672'.			
Sataic level from surface 138'.			
Tested capacity 483 gallons per minute.			
Temperature 62.5° F			
Water lowered to 258' in 7 hours and 24 minutes.			
Length of test 7 hours 31 minutes.			
S.S. #26286			

Thorpe Drilling Co.
ROCK ISLAND

Silvis #3
32-18N-1E

Q
Page 1 ILLINOIS GEOLOGICAL SURVEY, URBANA

Depth	Thickness	Top	Bottom
Yellow sand	33	0	33
Blue clay and sand	4	33	37
Blue clay	25	37	62
Sand	14	62	76
Blue clay and sand	19	76	95
Gray shale	25	95	120
Sharp sand	1	120	121
Gray lime rock-static water level	21	121	142
105'			
Gray lime rock-static water level	18	142	160
25'			
Gray lime rock	60	160	220
Brown limestone-static water level	10	220	230
25'			
Gray lime rock	218	230	448
Shale (Maquoketa) with lime streaks	87	448	535
Limestone	15	535	550
Shale (Maquoketa) and limestone	85	550	635
Brown shale	20	635	655
Gray shale (Maquoketa)	7	655	662
Gray limestone	58	662	720
Brown limestone	267	720	987
Sandstone (St. Peter)	20	987	1007
Shale	15	1007	1022
Sandstone (St. Peter)	76	1022	1098
Shale with streaks of sand	14	1098	1112
Limestone	124	1112	1236
Red shale	3	1236	1239
Gray limestone	226	1239	1465
Brown limestone	45	1465	1510
Cuttings washed away	8	1510	1518
Sandstone (Jordan)	92	1518	1610
Gray dolomite	10	1610	1620

COMPANY Thorpe Drilling Co.

NO. 3
SOCIETY NO. 54

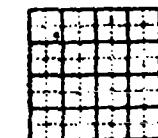
NAME Silvis

DATE DRILLED 1956

AUTHORITY Thorpe Drilling Co.

ELEVATION

LOCATION App. 1000' N line, 1250' W line, of Sec.
COUNTY ROCK ISLAND 32-18N-1E



Silvis

NN

John C. Moore Corporation, Rochester, N. Y. Binder and holes to leave, rock Fairchild 1/4" 2000

SHRIFT COMPANY	2	T 18 E.	R. 3 E. HOLE NO. HOLE NO.	32	
				Thickness	Depth
No.	STRATA	Feet	In.	Feet	In.
Cambrian system					
	Jordan (?) formation				
	Gravel, fine	10		1535	
	Trempealeau formation				
	Rock, hard (probably dolomite)	55		1590	
Trempealeau and Mazomanie-					
	Branconia formations, undifferentiated				
	Limestone, very hard,				
	with a few feins				
	of sandstone	320		1910	
	Branconia formation				
	Limestone, soft	15		1925	
	Dresbach ? formation				
	Sandstone, soft	55		1980	
	Lime, very hard	5	1/4	1985	1/4

~~ROCK ISLAND~~
T-ROLL RECORD
~~(744-114-40-20)~~

Index No. 62532
52-188-1B

John C. Moore Corporation, Rochester, N. Y. Dealer and Sales to Farmers, Ranchers, and Packer's Men. 25602

2-1/2 mi. N. Hillside
TOWN Rock Island TOWNSHIP Hampton
COMPANY

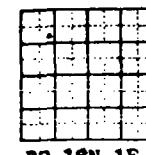
FARM City Wed. Silvia	No.	15-1	No.	32
AUTHORITY	No.		No.	Center SE 1/4 NW 1/4
ELLEVATION 250 ft				
COLLECTOR Record Abm. PHIL DELLEY, Crawford				
CONFIDENTIAL				
Ap. 1255' N line, 1230' W line of NW				
No.	CD # 317 STRATA	Thickness Feet	Thickness In.	Depth Feet
Ripley and Pleistocene systems				
Sand and clay 36 36				
Pennsylvanian, Devonian, Silurian, and Ordovician				
systems, undifferentiated				
Limestone with "veins" of bluish shale, (no trace of coal) 714 750				
Includes Pottsville? (Pennsylvanian), Cedar Valley (Devonian), and Wapsipinicon (Devonian) formations, Niagaran (Silurian) and Maquoketa (Ordovician) series, and part of Galena formation				
Ordovician system				
Mohawkian series				
Galena formation				
Large crevice followed by layer of sand 50 800				
Galena, Flatteville, Glenwood, and St. Peter formations and Prairie du Chien series, undifferentiated				
Limestone with a few "veins" (beds) of sandstone 650 1450				
Prairie du Chien series				
Gravel, fine 3 1453				
Rock (probably dolomite) 72 1525				
Index No. 0332				
FARM ROCK ISLAND F. - DRILL RECORD				
32-18N-1E				

ILLINOIS GEOLOGICAL SURVEY, URBANA

	Thickness	Top	Bottom
Sand and clay	36	0	36
No record	678	36	714
Lime rock with shale veins (shale was bluish)	36	714	750
A large crevice followed by a layer of sand	50	750	800
Lime rock with a few veins of sandstone	650	800	1450
Gravel, fine	3	1450	1453
Rock	72	1453	1525
Gravel, fine	10	1525	1535
Rock, hard	55	1535	1590
Lime rock (very hard with a few veins of sandstone)	320	1590	1910
Lime rock (softer)	15	1910	1925
Sandstone, soft	55	1925	1980
Lime rock, very hard	93	1980	1985-3"
Casing 15" castiron 10-38'			
12"	38-278'		
9"	278-1178'		

There was no trace of coal anywhere in this well although several pockets of natural gas.

COMPANY Silvis City Well
 FARM 1912 COUNTY no. 317
 DATE DRILLED P. W. Crawford
 AUTHORITY 580'
 ELEVATION App. 1255' N line, 1230' W line of NW
 LOCATION ROCK ISLAND
 COUNTY 32-18N-1E



Page 2

NEBRASKA GEOLOGICAL SURVEY, NEBRASKA

(71063-1024-8-49)

	Thickness	Depth
	Foot	In.
Sand, dolomite & shale		2058
Static Water Level:		
Top - 138'	0'	
138 - 150	27 1/2'	
150 - 157	25	
157 - 179	22	
179 - 245	70	
245 - 568	80	
568 - 590	50	
590 - 1135	45	
1135 - 1546	65	
1546 - 1675	91	
1675 - 1678	69	
1678 - 1993	64	
1993 - 2047	59	
2047 - 2058	63	
Casing 30' 6" of 22" O.D. from surface;		
182' 6" of 14" O.D. pipe from surface		
Sample Set #19041		
See file for Sample Study by M.V. Strantz (1900-2055')		

Varner Well Drig. Co. - City Ice & Fuel Co.
ROCK ISLAND
32-18N-1E

~~COL. DO NOT DETACH GEOLOGICAL/WATER
PROPERTY LOCATION~~

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 9-5-78

10. Property owner City of Silver Well No. 2160

Address 5415 S. 7th Street

Driller J. B. Guitzschmidt

License No. 182-630

11. Permit No. — 71-193

— Date —

12. Water from COOKHOUSE

13. County from which taken:

Formatio

20. *Country*

at depth 434 to 441 ft.

Sec. —

14. Screen: Diam. _____ in.

Twp. —

Length: _____ ft. Slot _____

— Rge. —

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Pt.)	To (Pt.)
12"	Steel pipe	C	Wall

SHOW
LOCATION IN
SECTION PLAT
Parcel #230
1600' NL 790' E
NE/c

16. Size Hole below casing: 1-1/2 in.

(permit

17. Static level 80 ft. below casing top which is _____ ft. above ground level. Pumping level 182 ft. when pumping at 100 gpm for 12 hours.

18.	FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
	10-11' Slat sand	15	15
	Pennsylvanian Shale	115	136
	Dickson	149	245
	Sullivan	149	130
	Minquaketa	5	442

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED A N Albrecht (old) DATE 11/25/78

ROCK ISLAND

COUNTY No. 21598

32-18N-1E

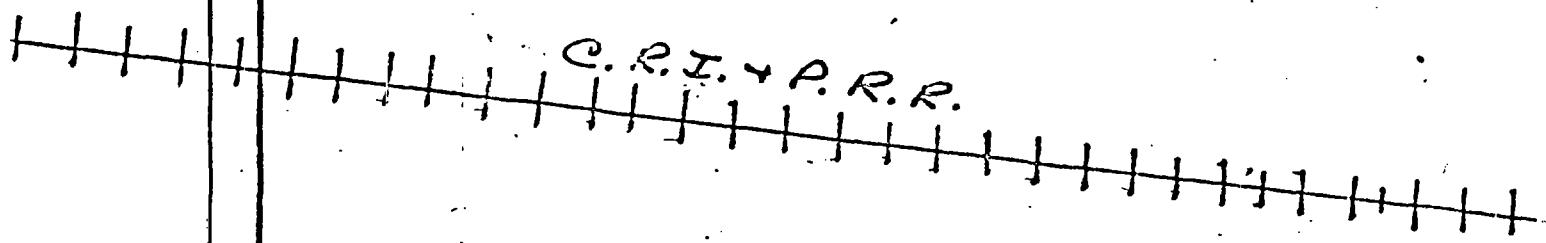
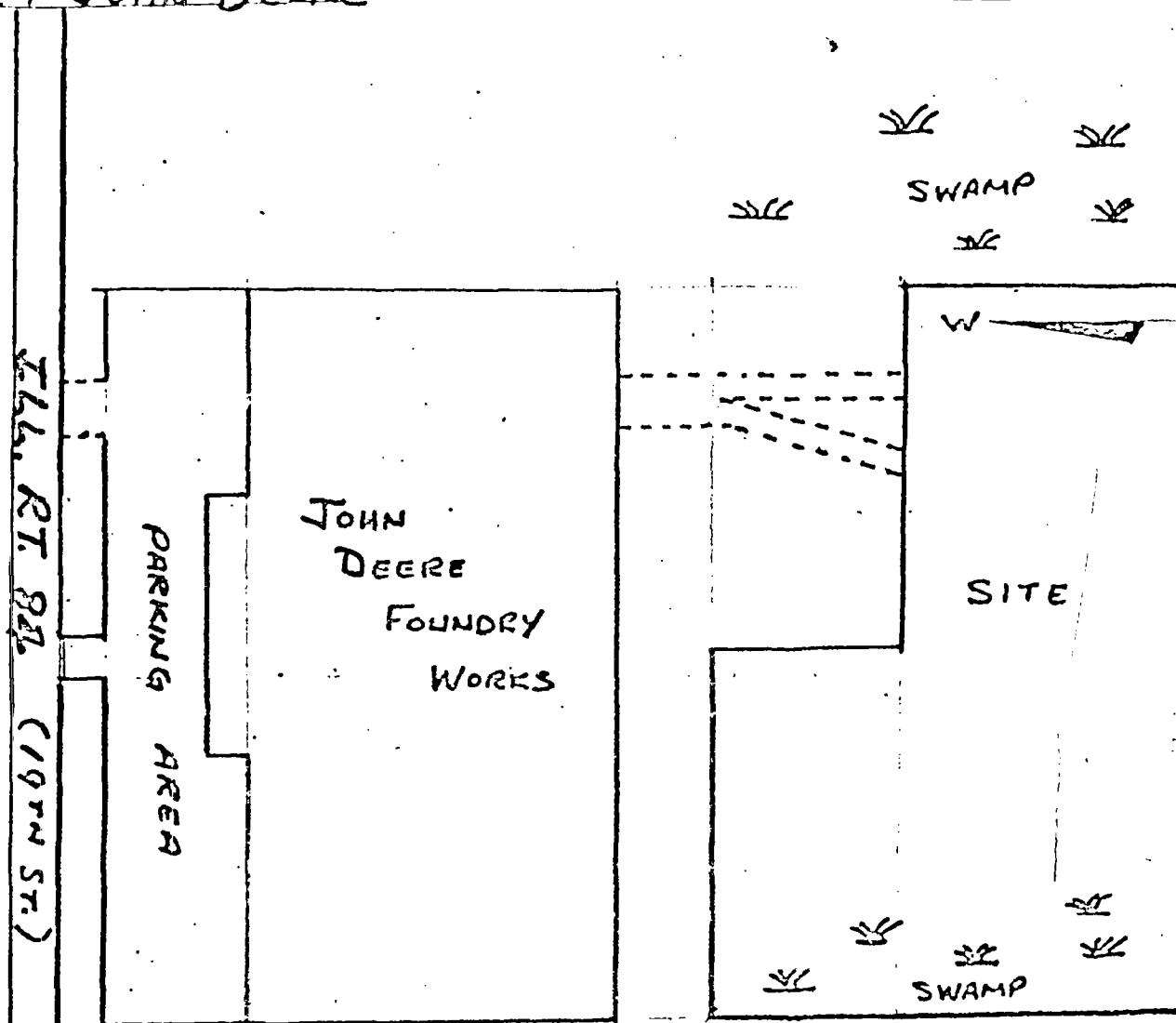
Description	Thickness		Depth	
	Feet	In.	Feet	In.
Surface drift; sandy			0-32	
Grey shale			136	
Grey sandy lime			138	
Hard lime & dolomite			152	
Grey lime			445	
Grey blue shale			539	
Lime & shale			555	
Shale - blue, gray & brown			671	
Lime			994	
Dolomite			1005	
Grey lime			1025	
Blue shale			1051	
Sandy lime			1135	
Grey dolomite			1223	
Light grey lime			1256	
Light grey lime; streaks of red shale			1267	
Light grey dolomite; " " "			1291	
Red shale; streaks of lime & dolomite			1307	
Grey & pink dolomite			1340	
Lime; white & green shale streaks			1367	
Light grey dolomite			1467	
Grey lime & dolomite			1524	
Grey lime			1549	
Grey dolomite - hard			1662	
Shale & lime			1685	
Dolomite-grey & pink			1822	
Grey sandy dolomite & shale			1850	
Grey dolomite			1860	
Grey & green dolomite & shale			1937	
Grey dolomite			1949	
White sand			1988	
Grey dolomite & sand			1999	
White sand			2056	

JACK ISLAND - D.L.R.C. 16181011

DATE: _____

MOLINE / JOHN DEERE

TIME: _____



92

R.T. 2

SILVIS